Amendment "B" page 2 of 7   DOCKET NO. 03-0485
10/658,168   81578(6653)

Amendment to the Claims:

     1-4 (canceled)

     5 (currently amended): <u>A method of qualifying a process tool comprising steps of:</u>

     <u>(a) finding a plurality of pre-scan defect locations on a surface of a semiconductor wafer;</u>

     <u>(b) subjecting the semiconductor wafer to processing by a process tool after step (a);</u>

     <u>(c) finding a plurality of post-scan defect locations on the surface of the semiconductor wafer after step (b);</u>

     <u>(d) calculating which defects were added by the process tool from the pre-scan defect locations and the post-scan defect locations;</u>

     <u>(e) displaying a scatter plot of a point representative of a total number of defects added by the process tool to the semiconductor wafer; and</u>

     <u>(f)</u> ~~The method of Claim 3 further comprising a step of~~ selecting the point on the scatter plot to initiate a display of one of a pre-test wafer map, a post-test wafer map, and an added defect map of defects added by the process tool to the semiconductor wafer.

     6 (previously presented): The method of Claim 5 further comprising a step of associating a spatial signature of added defects from the added defect map with a process tool malfunction.

     7 (canceled)

     8 (currently amended): <u>A method of qualifying a</u>

process tool comprising steps of:

     (a) finding a plurality of pre-scan defect locations on a surface of a semiconductor wafer;

     (b) subjecting the semiconductor wafer to processing by a process tool after step (a);

     (c) finding a plurality of post-scan defect locations on the surface of the semiconductor wafer after step (b);

     (d) calculating which defects were added by the process tool from the pre-scan defect locations and the post-scan defect locations by comparing a distance between a first point corresponding to a defect location in a first list of pre-test defect locations and a second point corresponding to a defect location in a second list of post-test defect locations with a registration tolerance; and

     (e) marking ~~The method of Claim 7 wherein~~ the defect location in the second list ~~corresponding to the second point is marked~~ as a non-adder when [[if]] the distance is less than the registration tolerance.

     9 (original): The method of Claim 8 wherein the first list and the second list are sorted by X-coordinate.

     10 (original): The method of Claim 9 wherein defect locations in the first list and the second list having identical X-coordinates are further sorted by Y-coordinate.

     11-14 (canceled)

     15 (currently amended): A computer program product for qualifying a process tool comprising:

     a medium for embodying a computer program for input to a computer; and

Amendment "B" page 4 of 7   DOCKET NO. 03-0485
10/658,168   81578(6653)

_____ a computer program embodied in the medium for causing the
computer to perform steps of:_

_____ (a) finding a plurality of pre-scan defect locations on a
surface of a semiconductor wafer;_

_____ (b) subjecting the semiconductor wafer to processing by a
process tool after step (a);_

_____ (c) finding a plurality of post-scan defect locations on
the surface of the semiconductor wafer after step (b);_

_____ (d) calculating which defects were added by the process
tool from the pre-scan defect locations and the post-scan
defect locations;_

_____ (e) displaying a scatter plot of a point representative
of a total number of defects added by the process tool to the
semiconductor wafer; and_

_____ (f) ~~The computer program product of Claim 13 further
comprising a step of~~ selecting the point on the scatter plot
to initiate a display of one of a pre-test wafer map, a post-
test wafer map, and an added defect map of defects added by
the process tool to the semiconductor wafer.

        16 (previously presented): The computer program
product of Claim 15 further comprising a step of associating a
spatial signature of added defects from the added defect map
with a process tool malfunction.

        17 (canceled)

        18 (currently amended): _A computer program product
for qualifying a process tool comprising:_

_____ a medium for embodying a computer program for input to a
computer; and_

_____ a computer program embodied in the medium for causing the_

Amendment "B" page 5 of 7   DOCKET NO. 03-0485
10/658,168   81578(6653)

computer to perform steps of:

        (a) finding a plurality of pre-scan defect locations on a
surface of a semiconductor wafer;

        (b) subjecting the semiconductor wafer to processing by a
process tool after step (a);

        (c) finding a plurality of post-scan defect locations on
the surface of the semiconductor wafer after step (b);

        (d) calculating which defects were added by the process
tool from the pre-scan defect locations and the post-scan
defect locations by comparing a distance between a first point
corresponding to a defect location in a first list of pre-test
defect locations and a second point corresponding to a defect
location in a second list of post-test defect locations with a
registration tolerance; and

        (e) marking ~~The computer program product of Claim 17
wherein~~ the defect location in the second list ~~corresponding
to the second point is marked~~ as a non-adder when [[if]] the
distance is less than the registration tolerance.

        19 (original): The computer program product of
Claim 18 wherein the first list and the second list are sorted
by X-coordinate.

        20 (original): The computer program product of
Claim 19 wherein defect locations in the first list and the
second list having identical X-coordinates are further sorted
by Y-coordinate.